cipitated retention or of surgery increases with increasing serum PSA level and/or baseline volume.

While the tertile analysis based on either serum PSA or prostate volume was a somewhat arbitrary categorization of the patient population, it proved to be useful in separating patients at lower and higher risk regarding symptom, bother, and flow rate changes. Additional analyses were done regarding the risk of retention or surgery. When plotting the incidences of spontaneous or precipitated retention or BPH-related surgery over a period of 4 years by incremental baseline serum PSA level, it is evident that the risk increases linearly with increasing baseline serum PSA level.

The AHCPR Guideline Panel challenged the urologic community to better define the natural history of untreated BPH in terms of changes in symptom severity, flow rate, and urinary retention and to determine whether disease progression (ie, worsening of symptoms or development of complications) could be predicted by baseline parameters.

The collection of articles reviewed here demonstrates that prostate volume and (as a proxy parameter) serum PSA level are useful baseline criteria by which to stratify patients presenting with LUTS and clinical BPH into those with lower and higher risk of progression in terms of all parameters, including symptom, bother, urinary flow rate, and the risk of retention or surgery. Thus, when patients present with LUTS and BPH, prostate volume and/or serum PSA level are useful in determining the need for treatment and, perhaps, the choice of treatment.

## **Erectile Dysfunction**

### Premature Ejaculation: Prevalent but Poorly Understood

Jacob Rajfer, MD University of California at Los Angeles

[Rev Urol. 2000;2(2):98-99]

ne of the least understood areas of urology and sexual dysfunction is ejaculation, the process by which the ejaculate, once it is deposited into the posterior urethra (seminal emission), is transported in an antegrade fashion out of the urethra. In the male, orgasm is the sensory perception of the ejaculatory response. Disorders of ejaculation can be divided into 3 main cate-

gories: anejaculation (inability to ejaculate and, by assumption, to experience orgasm), retrograde ejaculation (ejaculate goes into the bladder, but orgasm is still appreciated), and premature ejaculation (PE) (ejaculation and orgasm occur but much sooner than the patient and/or partner desires). This review will focus on PE and encompass a number of complementary studies.

## Penile Sensitivity in Men With Premature Ejaculation

Paick JS, Jeong H, Park MS. *Int J Imp Res.* 1998;10:247-250.

PE is the most common sexual dysfunction in men, affecting approximately 30% of men regardless of age.<sup>1</sup> One of the initial theories concerning the cause of this disorder was that the patient's penis was "very sensitive," triggering the ejaculatory response before the patient or his partner wished. Even though topical creams to "desensitize" the penis may be successful in improving the time to ejaculation,<sup>2</sup> Paick and colleagues recently demonstrated that penile sensitivity is probably not a contributing factor for PE. These authors used a vibrator in patients with PE and in controls without PE and showed that there was no difference between the groups in sensitivity of the glans, the shaft, or frenular area of the penis.

#### References

- Laumann EO, Oaik A, Rosen RC. Sexual dysfunction in the US: prevalence and predictors. JAMA. 1999;281:537-544.
- Choi HK, Xin ZC, Choi YD, et al. Safety and efficacy study with various doses
  of SS-cream in patients with premature ejaculation in a double-blind, randomized, placebo controlled clinical study. *Int J Imp Res.* 1999;11:261-264.

# Cortical Evoked Responses From the Perineal Nerve Uchio EM, Yang CC, Kromm BG, Bradley WE.

J Urol. 1999;162:1983-1986.

The major recent scientific finding involving PE is gleaned from the psychiatric literature: selective serotonin reuptake inhibitors (SSRIs) have a high incidence of anejaculation as one of their side effects. The exact mechanism of action of these drugs on the ejaculatory response is not known as yet, but recent electrophysiologic studies in men suggest that the pudendal nerve is probably involved. This is not surprising, since the musculature of the perineum and pelvis that is involved in the orgasmic phase of the ejaculatory response is known to be innervated by the pudendal nerve. For example, at the time of ejaculation, it is the contraction of the ischiocavernous muscles that surround the base of each corporal body that causes elevation of the intracorporeal pressure into the suprasystolic range (time of maximal rigidity of the penis during sexual activity); these

ischiocavernous muscles are innervated by branches of the pudendal nerve. Uchio and associates have recently isolated a branch of the pudendal nerve, called the perineal nerve, that is probably involved in this process. Knowledge of the pathway of this perineal nerve and how it may be interfered with, surgically and medically, should lead to better treatment strategies for patients with ejaculatory disorders, including PE.

Treatment of Premature Ejaculation With Paroxetine Hydrochloride as Needed: 2 Single-Blind Placebo Controlled **Crossover Studies** 

McMahon CG. Touma K. J Urol. 1999;161:1826-1830.

Clomipramine in the Treatment of Rapid (Premature) Ejaculation

Strassberg DS, de Gouveia Brazao CA, Rowland DL, et al. J Sex Marital Ther. 1999;25:89-101.

Short-Term Analysis of the Effects of as Needed Use of Sertraline at 5 PM for the Treatment of **Premature Ejaculation** 

Kim SW, Paick JS. Urology. 1999;54:544-547. The finding of anejaculation in a relatively high percentage of patients taking SSRIs has led to treatment regimens with SSRIs for patients with PE. Initial clinical reports with the SSRIs showed that using them round-the-clock is certainly effective in improving the time to ejaculation. But because of the other sexual (decreased libido) and nonsexual (fatigue, tiredness) side effects of these drugs and the fact that most patients do not engage in sexual activity on a daily basis, treatment strategies using these drugs as needed have been evaluated recently. These 3 studies, published within the last year, show that both round-the-clock and intermittent, as-needed dosing with SSRIs are effective in the management of PE. Data from the laboratory using the rat model have shown that paroxetine is probably the most effective of the SSRI drugs in inhibiting the contraction of the seminal vesicles, although in clinical trials, all SSRIs have shown efficacy in the management of PE. The dosages of the most commonly used drugs are: paroxetine, 10 to 20 mg; sertraline, 25 to 100 mg, and clomipramine, 25 to 50 mg. In our practice at UCLA, we start patients at the lowest daily dose for about 2 weeks; if there is no improvement in the disorder, we increase the dose for another 2 weeks. Once we find the correct dose for each patient, we prescribe it as needed, recommending that he take the drug about 3 to 4 hours before sexual activity.

### RESIDENTS IN UROLOGY YOU'RE INVITED

by the Medical Editors of Reviews in Urology

Submit a Case Review

for Publication in Reviews in Urology Write a Case Review, including history, evaluation, treatment, and discussion. Submit your Case Review by e-mail or mail (instructions below). Those approved by the Medical Editors and peer reviewers will be edited for publication in Reviews in Urology. The primary author of a published Case Review will receive \$250.

Name			
Telephone	Fax	E-mail	
Department head			
Case Review topic			

Mail to (include disk): Case Review, Reviews in Urology, 330 Boston Post Road, Darien, CT 06820-4027; E-mail to: herbert.lepor@med.nyu.edu